



**U.S. DEPARTMENT OF COMMERCE**  
National Oceanic and Atmospheric Admin.  
**NATIONAL OCEAN SERVICE**  
Florida Keys National Marine Sanctuary

**CONFIDENTIAL REPORT**  
**ATTORNEY SENSITIVE WORK PRODUCT**

**SUBJECT:** **MYRA LEE** Vessel Grounding Assessment

**DATE OF ASSESSMENT:** 12/11/00

**REPORT DATE:** 1/9/01

**PREPARED BY:** Lauri MacLaughlin, Resource Manager  
Florida Keys National Marine Sanctuary (FKNMS)  
Lower Region

and

Sean Meehan & Kevin Kirsch, Field Scientists  
NOAA/DAC/FKNMS

**FMP CASE NUMBER:** C 00-3A-13118

**FMP CITATION/WARNING #:**

#230062 A, Operation of vessel so as to cause damage to natural  
features, 15 CFR 922.163 (a)(5)(i)  
FFWCC Sanctuary Officer William B. Green

**VESSEL OWNER:**

[REDACTED]

**VESSEL OPERATOR:** (same as above)

**NAME & DESCRIPTION OF VESSEL:** **MYRA LEE**

FL Reg. #: FL 5810 KM  
57' 8" foot Fairline cabin cruiser  
twin engines, 1320 hp

**DATE/TIME OF GROUNDING:** 8/3/00, 8:00 a.m.

**LOCATION OF GROUNDING:** **Bethel Bank**, bank just north of Bethel bank  
1.0 nm Northwest of red marker #20  
2.27 nm Northwest of Marathon (Vaca Key)

2.37 nm North of Pigeon Key  
FKNMS, Lower Keys Region

**LAT/LONG POSITION: DGPS Coords.**

INBOUND track: 24° 44.4820  
(taken at North entry point) 81° 08.2595

**LENGTH OF GROUNDING TRACK: 53.9 meters**

Inbound Track: 30.87 meters

Outbound Track: 23.03 m

**DIRECTION OF GROUNDING TRACK:**

Inbound Track: 243° - 239° Southwest

Final Resting Place: 235° South-southwest

Outbound Track: 005° - 010° North-northeast

**WATER DEPTH:** ± 1.5 foot

**TABLE 1. Estimate of total area of live seagrass and coral destroyed by MYRA LEE on a shallow seagrass community near Bethel Bank, Marathon. See Figure 1 for details.**

<b>AREA OF TOTAL DESTRUCTION:</b>	<b>(100%)</b>	<b>91.0 sq. m</b>
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<b>AREA OF PARTIAL DESTRUCTION:</b>	<b>(50%)</b>	<b>1.90 sq. m</b>
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**TOTAL AREA OF DESTRUCTION: 92.9 sq. m**

**Species** affected: *Thalassia testudinum*, turtle grass; *Syringodium filiforme*, manatee grass; *Porites* sp., finger coral; *Penicillus dumetosus*, shaving brush algae; *Halimeda* sp., *Udotea* sp. and *Caulerpa* sp., green calcareous alga, miscellaneous marine algae and sponges.

NOTE: Total areas include only two-dimensional surface area of inbound, final resting place and outbound tracks. They do not include depth of prop-dredged scars, extent of seagrass rhizome (root) damage, nor volume of coral skeletons, plants and sediment excavated. As a result, the estimate of injury must be considered conservative.

**GROUNDING ASSESSMENT DISCUSSION**

The grounding site is located on the bank just north of Bethel Bank, 1.0 nm northwest (321°) of red flashing marker #20, 2.27 nm northwest (328°) of Marathon and 2.37 nm north (004°) of Pigeon Key, within the FKNMS Lower Region (see Figures 2 and 3).

An injury assessment was conducted on December 11, 2000 by FKNMS Resource Manager Lauri MacLaughlin with NOAA/DAC field scientists Kevin Kirsch and Sean Meehan. This survey involved deploying a fiberglass measuring tape along the baseline of the grounding track and mapping the injury area based on length, width and depth dimensions. Compass headings were also recorded. A map of the grounding track is included in this report (see Figure 1).

The habitat throughout the area of the grounding site is characterized as a shallow seagrass bank inhabited by turtle grass, *Thalassia testudinum*, finger coral, *Porites* sp., manatee grass, *Syringodium filiforme*, the green calcareous alga, *Halimeda* sp., *Udotea* sp., *Caulerpa* sp., *Penicillus dumetosus*, miscellaneous marine algae and sponges. Below is a description of our observations, as they apply to the diagram in Figure 1.

The inbound track consists of twin propeller scars that extend 15.5 meters in length, in a southwesterly direction (243°-239°), and which terminate at a large blow hole. A small berm borders the east edge of the blow hole. The final resting place of the bow extends 7.69 meters southwest (235°) beyond the blow hole. The outbound track extends from the west end of the blow hole to the north (005°-010°) for a distance of 23.03 meters. The inbound tracks, blow hole and outbound track are characterized as total destruction to the seagrass bed. A portion of the final resting place and the berm are characterized as partial destruction.

In addition to the survey of damage, underwater video was used to document the injury. A copy of this video tape is enclosed for your review. If further information is needed, please contact me at (305) 292-0311.

cc: Lt. Currul, FMP

## APPENDIX I

**TABLE 2. Estimate of total area of live seagrass and coral destroyed by *MYRA LEE* on a shallow seagrass community near Bethel Bank, Marathon. See Figure 1.**

<b>AREA OF TOTAL DESTRUCTION: (100%)</b>		<b>Dimensions (m)</b>	<b>Area (sq meters)</b>
<u>INBOUND TRACK:</u>			
W - 5	< 0.3 m W	0.13 m D	
E - 5	< 0.3 m W	0.10 m D	
W - 4	0.3 m W	0.13 m D	
E - 4	< 0.3 m W	0.10 m D	
W - 3	0.4 m W	0.17 D	
E - 3	0.4 m W	0.17 D	
W - 2	0.5 m W	0.17 D	
E - 2	0.5 m W	0.17 D	
W - 1	0.65 m W	0.17 D	
E - 1	<u>0.6 m W</u>	0.17 D	
	w Average W = 0.43		14.444 sq m
	E Average W = 0.42		
<u>BLOW HOLE 1:</u>			
1	8.5 m L	0.55 D	
2		0.67 D	
3		0.80 D	
4		0.65 D	
5		0.68 D	
6		0.55 D	
7		0.63 D	
		Average D = 0.65	45.801 sq m
<u>BOW FINAL RESTING PLACE:</u>			
1 (total injury)	4.67 m L	0.10 D	2.203 sq m
<u>OUTBOUND TRACK:</u>			
W - 1	0.9 m W	0.12 m D	
E - 1	0.6 m W	0.12 m D	

W - 2	0.8 m W	0.12 m D
E - 2	0.85 m W	0.08 m D
W - 3	0.6 m W	0.12 D
E - 3	0.55 m W	0.08 D

AREA OF TOTAL DESTRUCTION: (100%)	Dimensions (m)	Area (sq meters)
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W - 4	0.6 m W	0.12 D
E - 4	0.7 m W	0.08 D

W - 5	0.6 m W	0.05 D
E - 5	0.5 m W	0.03 D

W - 6	0.45 m W	0.05 D
E - 6	<u>0.45 m W</u>	0.03 D

w Average W = 0.66

E Average W = 0.61

26.62 sq m

<b>TOTAL Area of TOTAL DESTRUCTION:</b>	<b>89.068 sq. m</b>
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AREA OF PARTIAL DESTRUCTION (50%)	Dimensions (m)	Area (sq meters)
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BOW FINAL RESTING PLACE:

2 (partial injury)	3.02 m L	< 0.10 D
1.349 sq m		

<u>Berm:</u>	< 0.10 D	<u>2.451</u> sq m
		3.80 sq m

@ 50 % destruction      X .50

<b>TOTAL Area of PARTIAL Destruction: (adjusted)</b>	<b>1.90 sq m</b>
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<b>TOTAL AREA OF DESTRUCTION:</b>	<b>90.968 sq m</b>
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Total area of total destruction	89.068
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Total area of partial destruction (adjusted)	1.90
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<b>TOTAL INJURY AREA:</b> (Total Disturbed Habitat)	<b>92.868</b>	<b>sq</b>
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**m**

Total area of total destruction 89.068

Total area of partial destruction 3.80

**FIGURE 1: “MYRA LEE” Vessel Grounding**

